GX300 User Manual

GX300 User Manual

Congratulations on your purchase of the Antec GX300!

Following GX300 is Antec new military style chassis, in addition to continuation GX series of unique, wild, uninhibited, robust style, GX300 exterior design is sturdy and as powerful and dominating as the tough warrior. Front panel with plastic and 3D mesh design, tough lines with powerful mechanical sense. GX300 equipped with one USB3.0, one USB2.0 and one fan with high/ low speed control interface, this priceless product is unmatched by a similar specification of other enclosures. It comes with 1 x 120mm fan, both for cooling and silent computing.

At Antec, we continually refine and improve our products to ensure the highest quality. As such, your new chassis may differ slightly from the description in this manual due to improvements applied for the optimal building experience. As of November 15, 2014, all features, descriptions, and illustrations in this manual are correct.

Disclaimer

This manual is intended only as a guide for Antec's computer enclosures. For more comprehensive instructions on installing the motherboard and peripherals, please refer to the manuals that come with those components.

Table of Contents

Section 1: Introduction

1.1 Getting to Know Your Chassis....5
1.2 Chassis Specifications....6
1.3 Toolkit....7
1.4 Before You Begin....8

Section 2: Hardware Installation

2.1 Setting Up....10
2.2 Motherboard Installation....10
2.3 Power Supply Installation....12
2.4 Internal 3.5” / 2.5” Device Installation....13
2.5 Cable Management....15

Section 3: Front I/O Ports

3.1 USB 2.0....17
3.2 USB 3.0....17
3.3 HD Audio Ports....18
3.4 Power Switch / Reset Switch / Hard Disk Drive LED Connectors....18
3.5 Rewiring Motherboard Header Connections....19

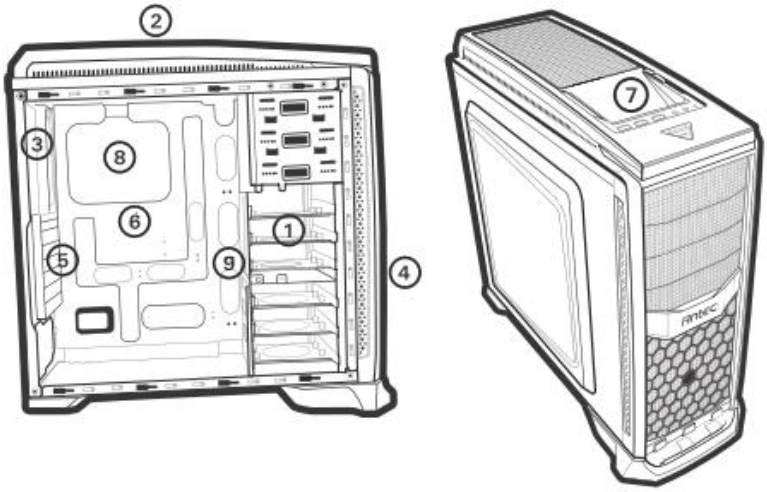
Section 4: Cooling System

4.1 Included Fans....21
4.2 Optional Fans....21
4.3 Fan Switch Controller....23
4.4 Air Filters....23

Section 1

Introduction

1.1 Getting to Know Your Chassis



1. 6 x 3.5” / 2.5” drive trays
2. 2 x 120 mm top exhaust fan
3. 1 x 120 mm rear exhaust fan (pre-installed)
4. 2 x 120 mm front intake fan
5. 7 expansion slots
6. Motherboards: Standard ATX, Micro-ATX, Mini-ITX
7. Front ports: USB3.0, USB2.0, Audio I/O
8. CPU cutout
9. Cable routing holes

1.2 Chassis Specifications

Chassis Type	ATX-Tower
Chassis Color	Black
Dimensions	18.89” (H) x 8.26” (W) x 18.89” (D) 480 mm (H) x 210 mm (W) x 480 mm (D)
Weight	11.9 lbs / 5.4 kg
Cooling	Fan mounts: - 2 x 120 mm top exhaust fan mount - 1 x 120 mm rear exhaust fan mount - 2 x 120 mm front intake fan mount Included Fan: - 1 x 120 mm rear exhaust fan
Drive Bays	- 6 x 3.5” / 2.5” tool-less HDD bays - 3 x 5.25” ODD bays
Expansion Slots	7
Motherboard Size	Standard ATX, Micro ATX, Mini-ITX
Front I/O Panel	- 1 x USB 3.0 - 1 x USB 2.0 - Audio In/Out

1.3 Toolkit

An inventory of all screws and intended usage and quantity is provided here:

A. Front fan screw (8) (6-32x27.5PM)
B. HDD screw (24) (6-32x17.5TM)
C. Motherboard screw (9) (6-32x6CM)
D. Motherboard standoff (1) (6-32x6.35)
E. Power supply screw + VGA (5) (Power +VGA 6-32x6HWM)
F. 2.5”/3.5” tray-mount screw (8) (ODD+SDD M3x5TM)
G. Foot(1)
H. Rubber audio closer(2)
I. Rubber USB port closer(2)

1.4 Before You Begin

In order to ensure that your building experience with the GX300 will be a positive one, please take note of the following:

- While working inside your GX300, keep your chassis on a flat, stable surface. Make sure your build environment is clean, well-lit, and free of dust.

- Antec chassis feature rounded edges that minimize the occurrence of hand injuries. Nonetheless, exercise caution and control when handling chassis interiors. We strongly recommend taking the appropriate time and care when working inside the chassis. Avoid hurried or careless motions.

- Handle components and cards with care. Do not touch the unshielded components or contacts on a card. Hold a card by its edges. Hold a component such as a processor by its edges, never by its pins.

- To avoid electrostatic discharge, ground yourself periodically by touching an unpainted metal surface (such as a connector or screw on the back of this computer) or by using a wrist grounding strap.

- Before you connect a cable, ensure that both connectors are correctly aligned and oriented. Bent pins can be difficult to fix and may require replacement of the entire connector.

- This manual is not designed to cover CPU, RAM, or expansion card installation. Please consult your motherboard manual for specific mounting instructions and troubleshooting. Before proceeding, check the manual for your CPU cooler to find out if there are steps you must take before installing the motherboard.

- Do not sit on your chassis. Although it is constructed of heavy-duty steel and internally reinforced, it is not designed to support the weight of an adult, and may buckle.

- Remember to use the right tools for each task. Do not use improvised screwdrivers like coins, nails or knife blades as they may result in damage to screw threads or even injury. Do not use your fingernails to separate edges or lift the sides of the chassis, as paint chipping or injury may occur.

Section 2

Hardware Installation

2.1 Setting Up

Put the case upright on a flat, stable surface so that the side panel is facing you. To remove the left and right side panels, remove these thumbscrews first.

Note: Place the panel thumbscrews aside carefully and remember where they are.

Remove the panel by gripping the end of the panel
at the top & bottom and swinging the panel outward.
Do not pull the panel back toward the rear of the chassis.

Remove the panel by the end of the panel at the top & bottom and swing the panel outward.

CAUTION: Do not use your fingernails to pry or lift the panels. Damage to the panels or injury to your fingernails may result.

2.2 Motherboard Installation

Before proceeding:

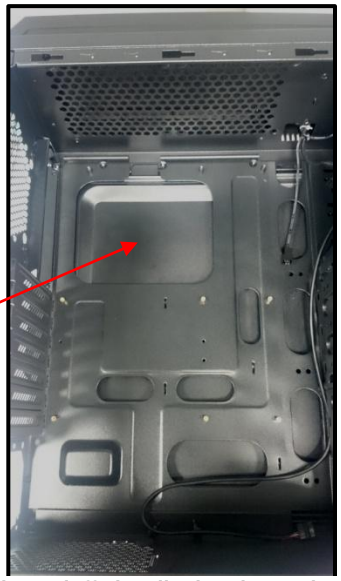
Check the manual for your CPU cooler to find out if there are steps you must do before installing the motherboard.

Make sure you have the correct I/O panel for your motherboard. If the panel provided with the chassis isn't suitable, please contact your motherboard manufacturer for the correct I/O panel.

Make sure you have the correct I/O panel.

The GX300 comes with nine preinstalled motherboard standoffs. These are positioned for Standard ATX motherboards but can be relocated to accommodate other form factors.

1. Align the motherboard with the standoff holes on the motherboard tray and remember or mark which holes are lined up
2. Install standoffs as needed and put the motherboard in.



Install the motherboard standoffs by aligning the motherboard with the standoff holes.

CAUTION

Make sure to remove any unused motherboard standoffs. They may come into contact with the back of the motherboard and may electrify your chassis exterior if left connected.

3. Screw your motherboard into the standoffs with the provided motherboard mounting screws.

Use the provided motherboard mounting screws to secure your motherboard into the standoffs.

2.3 Power Supply Installation

1. With the case upright, place the power supply on the right side of the case.
2. Push the power supply to the back of the case as illustrated in the image and align the mounting holes.
3. Attach the power supply to the case with the screws provided.
4. In case your power supply has a top exhaust fan you can place it upside down because your GX300 has an exhaust place, with dust filter, on the bottom of the enclosure specially for this purpose. (See paragraph 4.4)

Attach the power supply with the provided screws.

2.4 Internal 3.5” / 2.5” Device Installation

The GX300 has six drive bays that are compatible with both 3.5” and 2.5” drives.

To install a 3.5” drive:

1. Remove one of the drive trays by pinching the ends of the tray inward and pulling the drive tray out.
2. Place your 3.5” drive on the tray so that the holes line up with the silicone grommets.
3. Using the 3.5” drive screws (F in Section 1.3), secure your 3.5” drive to the tray. We recommend using your hand to find the exact threading of the drive’s holes then using a screwdriver to completely secure your drive. **Do not over-tighten the screws** as this will minimize the grommets’ ability to reduce vibration.

Use your hand to find the drive’s holes.

Screw in the holes to secure your drive.

4. Now that your drive is secured to the tray, pinch the ends of the tray and insert your drive into the bay. You will hear your device click into place.

Pinch the ends of the tray and insert your drive until it clicks.

To install a 2.5” drive:

Each of the six 3.5” drive bays also support 2.5” drives

1. Extract one of the drive trays by pinching the ends of the tray inward and pulling the drive tray out.
2. Place your 2.5” drive on the tray so that the holes line up with the 2.5” tray holes.
3. Using the 2.5” drive screws (F in Section 1.3), secured your 2.5” drive to the tray with a screwdriver.
4. Now that your drive is secure to the tray, pinch the ends of the tray and insert your drive into the bay. You will hear your device click into place.

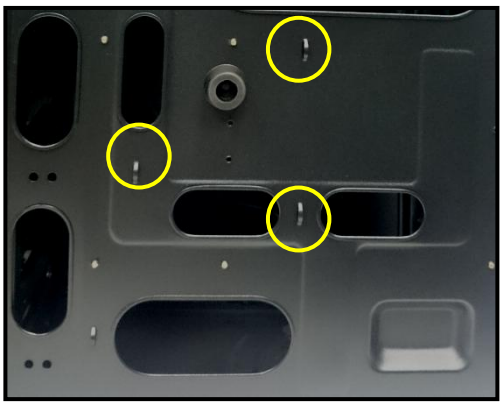
Align and secure the 2.5” drive onto the drive holder

2.5 Cable Management

There is a cable management compartment between the motherboard and right side panel, as well as cable tiedowns located on the back of the motherboard panel. You can tuck excess cables in this compartment or route them to the drive bays.

Choose the cables you would like to pass through the holes behind the motherboard tray. Pull them through the hole toward the right side of the case.

Use the zip ties provided to hold your cables in place. Zip ties can be anchored to tiedown locations located on the back of the motherboard panel.



Use the grommet-lined cable routing holes to route PSU cables. The yellow circle shows a cable tiedown.

For cables which will be routed back to front drives or other internal accessories, feed the cables back through the insertion point nearest the destination of the cable. Connect the cable and then pull the slack back to the right side of the case.

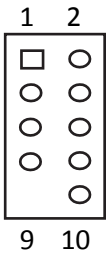
For cables which will be routed directly to front drives or other internal accessories, cable tiedowns are located along the drive cage. Bundle front drives' or other internal accessories' cables together and secure them using tiedowns.

Section 3

Front I/O Ports

3.1 USB 2.0

Connect the front I/O panel USB cable to the USB header pin on your motherboard. Check your motherboard user's manual to ensure that it matches the table below:

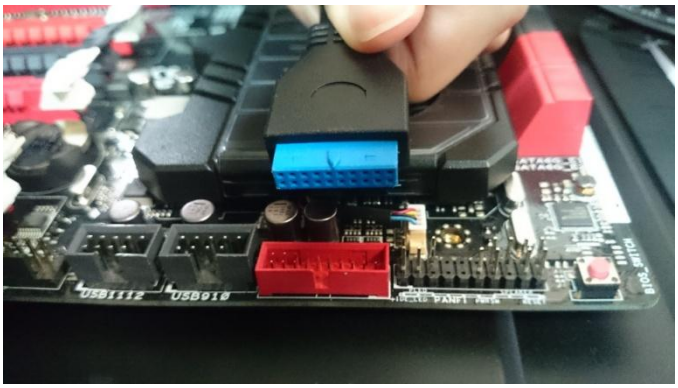


Pin	Signal Names	Pin	Signal Names
1	USBPower1	2	USBPower2
3	NegativeSignal1	4	NegativeSignal2
5	PositiveSignal1	6	PositiveSignal2
7	Ground1	8	Ground2
9	Key(No Connection)	10	Empty Pin

3.2 USB 3.0

The GX300 comes with one front panel USB 3.0 ports and includes an internal motherboard connector. To access USB 3.0 capability from the front panel:

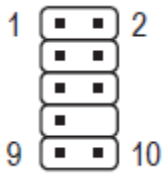
1. Identify the USB 3.0 header on your motherboard.
2. Connect the USB 3.0 header to the motherboard port. Be sure to align the connector in the proper orientation so that you do not damage the pins on your motherboard.



Align the connector properly to prevent damage to your motherboard.

3.3 HD Audio Ports

There is an Intel® 10-pin HDA (High Definition Audio) connector linked to the front panel of the chassis.

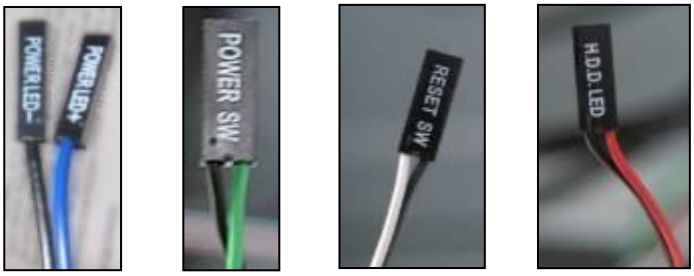


Pin	Signal Names (HDA)
1	MIC2L
2	AGND
3	MIC2R
4	AVCC
5	FRO-R
6	MIC2_JD
7	F_IO_SEN
8	Key (no pin)
9	FRO-L
10	LINE2_JD

You can connect the HDA connector, depending on your motherboard. Locate the internal audio connectors from your motherboard or sound card and connect the audio cable. Consult your motherboard or sound card manual for the pin-out positions.

3.4 Power Switch / Reset Switch / Hard Disk Drive LED Connectors

Connected to your front panel are LED leads for power and HDD activity, as well as switch leads for the power and reset buttons. Attach these to the corresponding connectors on your motherboard. Consult your motherboard manual for specific pin header locations. For LEDs, colored wires are positive (+). White or black wires are negative (–). If the LED does not light up when the system is powered on, try reversing the connection. For more information on connecting LEDs to your motherboard, see your motherboard user's manual.



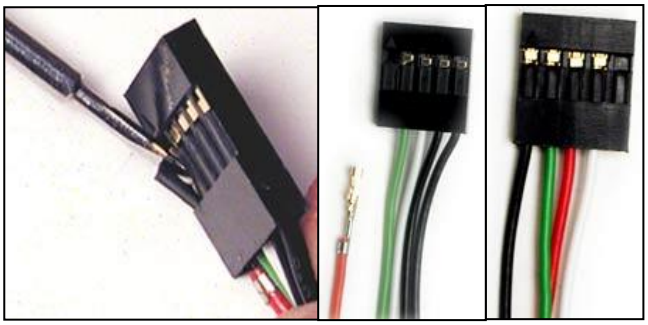
Front panel leads

Note: Polarity (positive and negative) does not matter for switches.

3.5 Rewiring Motherboard Header Connections

There may come a time when you need to reconfigure the pin-out of a motherboard header connector. Examples could be for your USB header, audio input header, or some other front panel connector such as the Power Button connector.

Before performing any work, please refer to your motherboard user's manual or your motherboard manufacturer's website to confirm the pin-out needed for your connector. We strongly recommend making a notated drawing before beginning work so that you can recover if your work gets disturbed.



Front panel headers

Determine which wires you need to remove in order to rewire your plug to match the USB pin-outs on your motherboard (refer to your motherboard user's manual). Working on one connector at a time, use a very small flathead screwdriver or similar tool to lift up on the black tab located beside the gold posts (squares). This will allow you to easily slide out the pins from the USB plug.

Working carefully so as not to damage the wires, connectors, or pins, slowly remove the pin from the connector. Repeat these steps for each wire you need to change.

Working carefully so as not to damage the wires, connectors or pins, slowly insert the pin into the correct slot of the connector then snap closed the black tab that was lifted in step 1. Repeat these steps for each wire you need to change.

Section 4

Cooling System

4.1 Included Fans

The GX300 comes with one standard 120 mm sleeve fan at the rear.
120 mm TwoCool™ fan specifications:

Size	120 x 25 mm two-speed fan
Rated Voltage	12V DC
Operating Voltage Range	6.0V～13.2V

Speed	Input Current	Static Pressure	Noise	Power Dissipation
1100RPM ±10%	0.30A	1.32 mm-H_2O	26.5 dBA	3.0W

4.2 Optional Fans

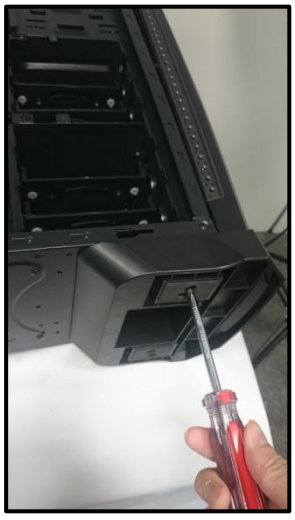
The GX300 includes mounts for up to four more fans. These mounts are as follows:

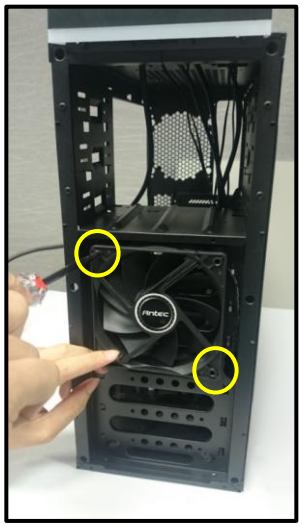
- 2 x 120mm front intake fan mounts
- 2 x 120mm top exhaust fan mounts

Front intake 120 mm fans
You may need to remove the front panel in order to install fans.

How to remove the front panel

1. Lie down the case on a flat surface and make sure the front panel is on your right hand side.
2. Screw off 4 screws to remove the front stand.
3. Use flathead screwdriver to pull open the front panel.
4. Align the fan on the mounting holes and using 2 of the long screws provided (A in Section 1.3). and screw in the fan in the top-left and lower-right holes (as pictured).





Note: you can install a maximum of two 120mm fans on the front case.

Top exhaust 120 mm fans

The GX300 includes two 120mm top fan mounts

1. Align your fan with the pegs that correspond with the fan screw holes on the fan.
2. Push your fan into the slot until secure. You will hear your fan lock into place when the brackets around the fan snap into place.

Align your fan with the pegs that correspond with the fan screw holes on the fan.

4.3 Fan Switch Controller

The GX300 has 2-way speed switches that let you choose speed best suited to your need.

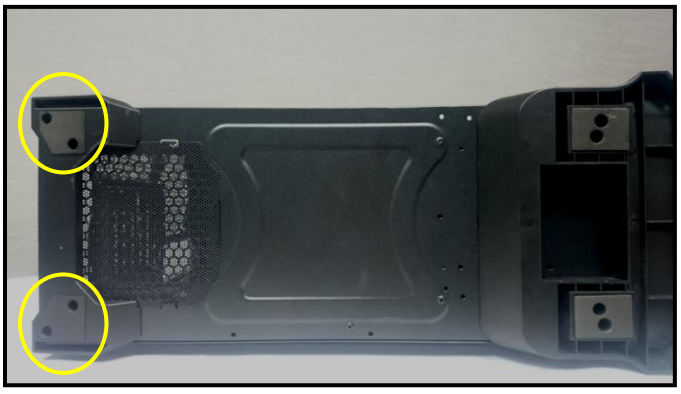
Low mode: 600 R.P.M
High mode: 1200 R.P.M

4.4 Air Filters

There are two filters in the GX300 that can be removed and washed. One filter is on the front and the other is the PSU intake filter. You can access the front filter by opening the front panel. The filter is located on rear of front panel. How to open the front panel (please see 4.2 section).
The GX300 features a removable PSU filter that can be taken out directly from the bottom of the chassis.

How to remove the PSU filter

1. Lie down the case on a flat and stable surface
2. Screw off the 4 screws to remove the rear stand.
3. You may take out the PSU filter directly



Remove the rear stand by screw off 4 screws (yellow circles).

Note: From time to time it will be necessary to wash the installed air filter. Not washing the air filter will result in higher system temperatures and possible stability problems. We recommend checking the air filter at least once a month initially. The frequency will change depending on system usage (users whose systems run 24/7 will likely have to check/wash more often than those who don't use their systems every day) and on environmental conditions.

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